The Fishing Industry in Quebec

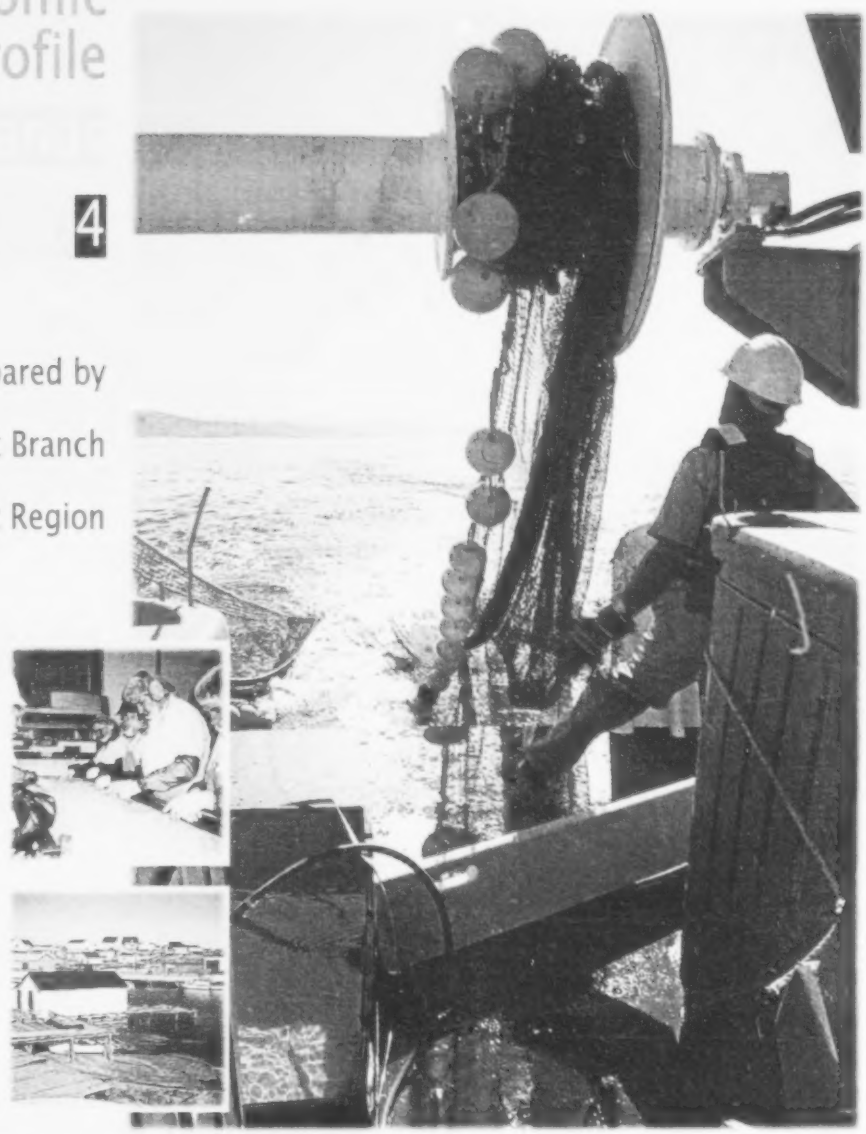
Socio-Economic Profile

4

Prepared by

Policy and Economic Branch

Quebec Region



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Canada

THE FISHING INDUSTRY IN QUEBEC
SOCIO-ECONOMIC PROFILE

MAGDALEN ISLANDS

MAY 2004

FISHERIES AND OCEANS CANADA

QUEBEC REGION

Published by:
Policy and Economics Branch
Fisheries and Oceans Canada
Quebec, QC
G1K 7Y7

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Catalogue number Fs 66-5/174F
ISSN 0847-1185

May 2004

Cette publication est également disponible en français.

105-03466/

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ACRONYMS

BAPAP: *Bureau d'accréditation des pêcheurs et aides-pêcheurs du Québec*
CRIQ: *Centre de recherche industriel du Québec*
DFO: Fisheries and Oceans Canada
DRPE: Policy and Economics Branch
HRSDC: Human Resources and Skills Development Canada
MAPAQ: *Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec*

ABBREVIATIONS

M$: millions of dollars
K$: thousands of dollars
B$: billions of dollars

SYMBOLS

p: preliminary
no.: number

ACKNOWLEDGEMENTS

A great amount of statistical data from the Fisheries Management Branch's Stastistics Service was required to complete this study. To this end, we would like to thank this service's staff, in particular, Édith Lachance and Bruno Lévesque for their generous collaboration.

We would also like to thank Human Resources and Skills Development Canada and more particularly Sylvain Labbé, Claude Arsenault and Gérald Dubé, who provided an analysis of the labour market indicators. This analysis gave us a clearer view of the labour market.

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INTRODUCTION

This study draws a portrait of the Magdalen Islands maritime sector and more particularly, its fishing industry. First, an analysis of the demographic and socio-economic trends is presented. Several variables make up this socio-economic portrait: population, level of education, participation rate, unemployment rate, composition of income and sector of economic activity. This analysis demonstrates the importance of the fishing industry for the Magdalen Islands.

Secondly, the fish harvesting sector is described and analyzed through the many elements that define it. Landings, both in terms of volume and value, are presented in a historical perspective. In order to reflect the harvest industry's current situation, the most recent fishing season was examined more closely. This section also contains information on the number of active fishermen, licences, the importance of certain species and many other details, which provide a sound comprehension of this area of activity.

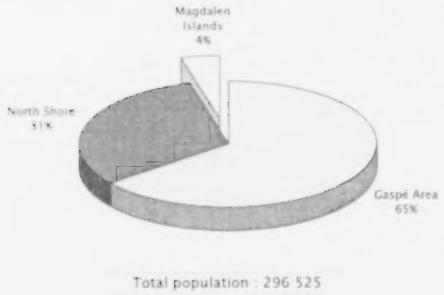
Finally, the last section deals with the marine product processing sector. Among other data, information is provided on the composition and value of post-plant production, the number of jobs in this sector and the importance of certain species for this economic activity.

1. The Magdalen Islands: A Socio-Economic Profile

1.1 Demographic Context

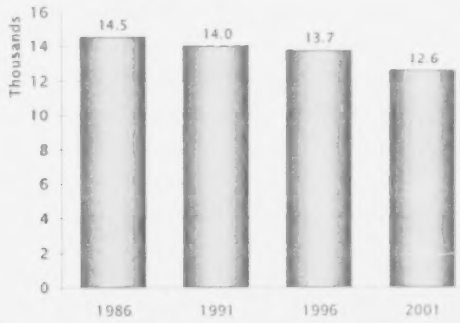
Among Quebec's maritime sectors[1], the Magdalen Islands sector is the least populated with 4% of the total population. While Quebec's population growth is weak[2], the population of the Magdalen Islands decreases each year. This sector's demographic development shows a negative trend with a population that has decreased almost 14% between 1986 and 2001. The rhythm of this decrease was emphasized between 1996 and 2001 with an 8% decrease in population.

Graph 1: Distribution of the Population in the Maritime Sectors, 2001



Source: Statistics Canada, 2001 census, special compilations

Graph 2: Population Development in the Magdalen Islands, 1986 to 2001



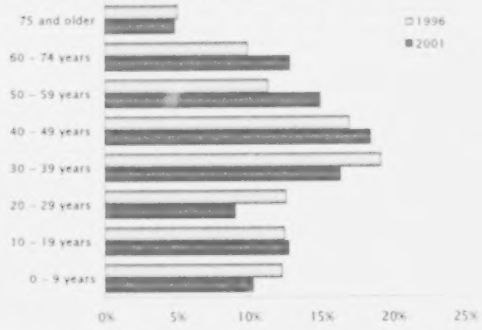
Source: Statistics Canada, 2001 census, special compilations

Moreover, these changes in the population are not taking place in a uniform manner. In fact, by observing the evolution of the Magdalen Islands age pyramid, we see the effect of the youth exodus and the larger proportion of people 40 years and older. Between 1996 and 2001, the proportion of 15 to 39 year olds dropped from 38% to 32% in the Magdalen Islands. The population aged 20 to 39 years had the largest decrease. This crumbling of the base of the age pyramid can also be seen when comparing Quebec's global situation with the situation in the Magdalen Island. The proportion of young Magdalen Islanders is smaller than for Quebec and the proportion of older Islanders is larger.

[1] The designation "maritime sector" used in this document refers to geographical regions defined by Fisheries and Oceans Canada. The main maritime sectors are the Gaspé Area, the North Shore and the Magdalen Islands (see Appendix 1).

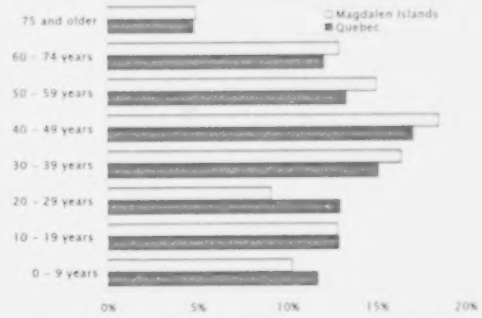
[2] Between 1996 and 2001, the population growth in Quebec was 1.1%.

Graph 3: Evolution of the Age Pyramid for the Magdalen Islands between 1996 and 2001



Source: Statistics Canada, 2001 census, special compilations

Graph 4: Age Pyramids for the Magdalen Islands and Quebec, 2001

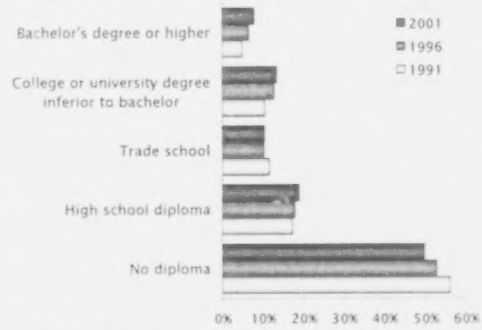


Source: Statistics Canada, 2001 census, special compilations

1.2 Level of Education

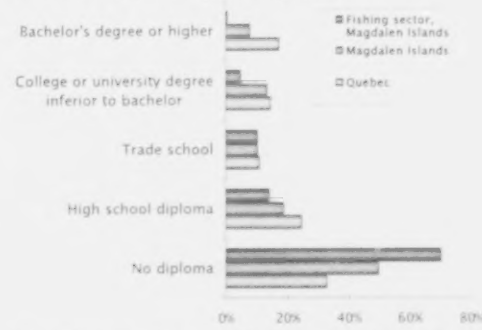
When we compare the different levels of education in Quebec, the Magdalen Islands and the fishing industry, we see significant disparities. The portion of the population that has no diploma is higher in the fishing industry. However, this proportion of non-graduates is following a downward trend since it dropped from 76% in 1991 to 70% in 2001.

Graph 5: Evolution of the Level of Education in the Magdalen Islands, 1991 to 2001



Source: Statistics Canada, 2001 census, special compilations

Graph 6: Level of Education in Quebec, the Magdalen Islands and the Fishing Industry, 2001

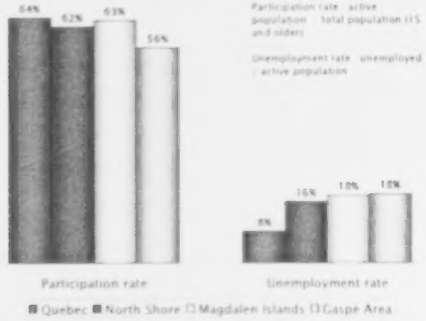


Source: Statistics Canada, 2001 census, special compilations

1.3 Participation Rate and Unemployment Rate

The unemployment rates in the maritime sectors are much higher than in Quebec. In the Magdalen Islands, the difference with Quebec reaches more than 9 percentage points, for an unemployment rate of 17.6% in 2001. This unemployment rate is also the second highest after the Gaspé Area, which reached 18%.

Graph 7: Participation and Unemployment Rate in the Maritime Sectors and in Quebec, 2001



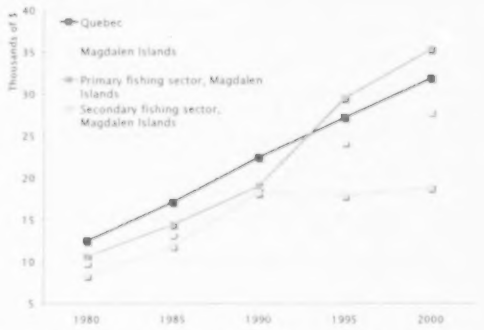
Source: Statistics Canada, 2001 census, special compilations

The participation rate is also a significant variable used to characterize the labour market. It expresses the active proportion of the population compared to the total population aged 15 and older. This rate also illustrates the economy's ability to generate employment. We observe that the participation rate in the Magdalen Islands is the highest of the maritime sectors and even nears the participation rate for the entire province of Quebec. This result means that an important portion of the total population aged 15 and older is active. However, the evolution and composition of the income characterizes the labour market in a more precise manner.

1.4 Development and Composition of Income

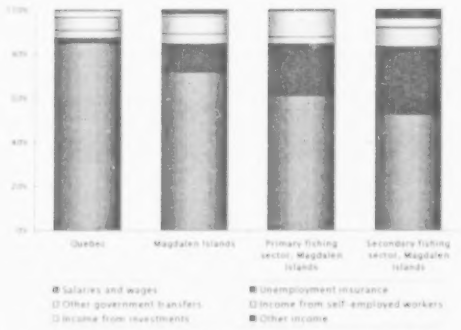
The average income of the population in the Magdalen Islands is lower than Quebec's population. In 2000, the income gap between the two groups reached almost 13%. Between 1995 and 2000, the average income earned by the Magdalen Islands population increased 15% while this growth was 17% for all of Quebec.

Graph 8: Evolution of the Average Income in Quebec, the Magdalen Islands and the Fishing Industry, 1985 to 2000



Source: Statistics Canada, 2001 census, special compilations

Graph 9: Composition of the Average Income for the Population, 2000



Source: Statistics Canada, 2001 census, special compilations

In 2000, the average income in the Magdalen Islands' primary fishing sector[3] was higher than that for all of Quebec. The significant value of landings of lobster and snow crab explains these results. However, this trend was not reflected in the same way in the secondary fishing sector. Between 1990 and 1995, there was a slight decrease in the average income for this sector. This situation can be attributed to the groundfish moratoria. In fact, an important decrease was observed in the volume of groundfish processed in the Magdalen Islands since these moratoria. Despite a slight increase in average income in the secondary fishing sector [4] for the period from 1995 to 2000, the income is below the average for the population of Quebec and the Magdalen Islands. In 2000, the difference with the Quebec average reached almost 40%. Furthermore, for the population working in this sector, the portion of the average income from unemployment insurance (31%) is higher only for the primary fishing sector in the Magdalen Islands (23%), the entire population of the Magdalen Islands (13%) and Quebec (2%).

Moreover, the main source of income for an important part of the population working in the fishing industry is the payment of government transfers[5]. In the primary fishing sector, this proportion is 38%, while for the secondary fishing sector; this same proportion reached

[3] The primary fishing sector refers to the capture of fish resources.

[4] The secondary fishing sector refers to the processing of fish resources.

[5] Government transfers: Income from all government transfers provided by federal, provincial and municipal governments. The payment of transfers includes the Old Age Pension and Guaranteed Income Supplement, benefits from the Quebec Pension Plan or the Canada Pension Plan, unemployment insurance, family allowances, federal tax credits for children and other income from public sources.

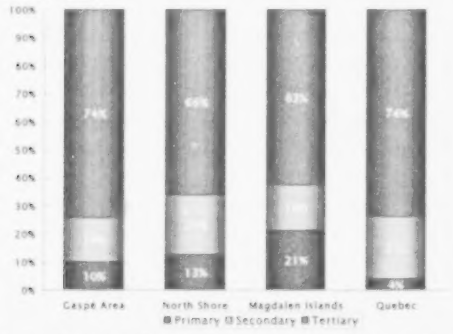
50%. For comparative purposes, this same proportion reached 23% for all Magdalen Islanders and 8% for all Quebeckers.

In the Magdalen Islands, unemployment insurance makes up 79% of transfer payments for workers in the secondary fishing sector and 88% of transfer payments for workers in the primary fishing sector.

1.5 Sectors of Activity

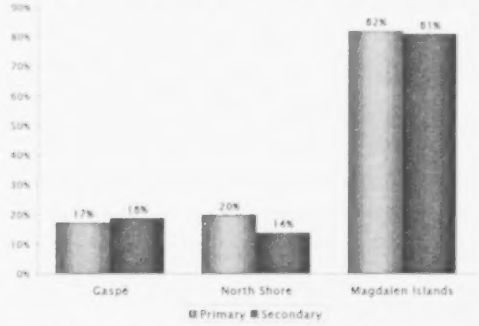
In the Magdalen Islands, the primary sector generates 21% of the jobs, five times more than the proportion observed for all of Quebec. The primary sector also generates more jobs than the secondary sector, contrary to the other maritime sectors and all of Quebec. Fishing activities as well as salt mines (mining) make up an essential portion of the primary sector. The secondary sector generates less jobs in the Magdalen Islands (16%) compared to the North Shore (21%) and all of Quebec. Furthermore, the proportion of jobs generated by the tertiary sector is lower than in the other maritime sectors and for all of Quebec.

Graph 10: Distribution of the Active Population According to Sector of Economic Activity and Maritime Sector, 2001



Source: Statistics Canada, 2001 census, special compilations

Graph 11: Proportion of the Population Aged 15 years and Older in the Primary and Secondary Sectors of the Fishing Industry in the Marine Sectors, 2001



Source: Statistics Canada, 2001 census, special compilations

The fishing industry is an important component of the Magdalen Islands' economy since 82% of the population aged 15 and older is linked to this economic activity in the primary sector. This proportion is 81% in the secondary sector. It is also the Magdalen Islands sector that is the most dependent on the fishing industry.

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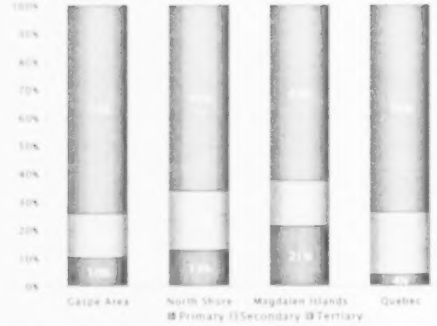

Source: Statistics Canada, 2001 census, special compilations

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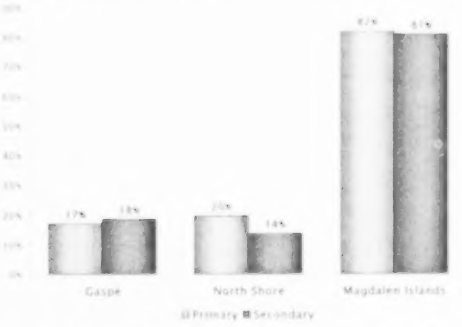

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A total of 8 200 people were working in the primary fishing sector and the marine processing sector in Quebec in 2001. Moreover, close to 90% worked in the maritime sectors of the Gaspé Area (43%), the Lower North Shore (24%) and the Magdalen Islands (23%), a total of 7 300 people. In the Magdalen Islands, almost 1 800 people worked in the fishing industry in 2001.

Table 1: Population of Individuals 15 Years of Age and Older in the Fishing Industry in Quebec and the Maritime Sectors, 2001

	Gaspé Area	Magdalen Islands	North Shore	Elsewhere in Quebec	Quebec
Primary Sector	1 620	1 020	965	245	3 850
Secondary Sector	1 925	755	1 020	660	4 360
Total	3 545	1 775	1 985	905	8 210

Source: Statistics Canada, 2001 census, special compilations

1.6 Labour Market Indicators for the Gaspé Area-Magdalen Islands Region[6]

Special Collaboration with
Human Resources and Skills Development Canada

During the 2001-2003 period, the regional labour market experienced strong growth. 750 jobs were created on average per year from 2001 to 2003. Supported by a decreasing population aged 15 years and older, the unemployment rate jumped almost four percentage points to reach 45%. The economy's vigour was mostly felt in 2002 and 2003. 2001's job report was inferior to 2000.

[6] This section presents recent data on the labour market. It was prepared by Human Resources and Skills Development Canada (HRSDC) using data from Statistics Canada's Labour Force Survey. Statistics Canada publishes an estimation of the main labour market indicators every month based on economic region, using the results of the Labour Force Survey (LFS). These regions are generally made up of several census divisions within a province. In Quebec, the census divisions correspond to the territorial limits of regional county municipalities (RCM). It is the only source of monthly and annual estimations of the activity on the intra-provincial labour market.

The Gaspé Area-Magdalen Islands economic region is a vast 20 400 square kilometer peninsula pointing into the Gulf of the St. Lawrence, in Quebec's southeastern-most sector. It is also the Magdalen Islands Archipelago located 200 km from the coasts of the Gaspé Area. The peninsula includes the limits of the following five regional county municipalities (RCM): Haute-Gaspésie (from Cap-Chat to Sainte-Madeleine-de-la-Rivière-Madeleine), Côte-de-Gaspé, Rocher-Percé, Bonaventure and Avignon. The Magdalen Archipelago corresponds to the RCM of the Magdalen Islands. At the time of the 2001 census, the region was home to 96 924 people.

Favourable economic perspectives possibly motivated individuals to re-enter the labour market in search of a job. The regional labour market saw its active population grow 500 people per year between 2001 and 2003. As the participation in the labour market grew less rapidly than the number of jobs, the unemployed population recorded a decrease equivalent to over 250 people per year. The unemployment rate fell significantly in 2003 to end at 17.7%.

Due to the region's demographic context, the population old enough to work (15 years and older) decreased approximately 0.7% per year since 2001. According to Statistics Canada's estimates, there were 81 900 people aged 15 and older in the Gaspé Area-Magdalen Islands. Let us mention that the data from the last census in Canada (2001) indicated a drop of 8 250 people between 1996 and 2001. The population aged 15 years and older counted 4 425 less people. The low birth rate in the last 20 years and the exodus of the population led to a decrease in the region's work-aged population.

From 2001 to 2003, the active population's workforce increased slightly. As such, 1 5000 more people participated in the labour market, an average increase of 500 people per year. However, this increase mainly occurred in 2001 and 2002. The population's workforce remained the same in 2003, 44 600 people. Let us emphasize that since 1987, the number of people in the active population never rose above 44 600.

Table 2: Main Labour Market Indicators for the 2001-2003 Period, Gaspé Area-Magdalen Islands Region

	Gaspé Area-Magdalen Islands				All of Quebec				Gaspé Area-Magdalen Islands/Quebec
	2001	2002	2003	2001-2003	2001	2002	2003	2001-2003	2001-2003
Population aged 15 and older ('000)	83.2	82.5	81.9	82.5	5 984.5	6 033.3	6 083.5	6 033.8	1.4%
Active population ('000)	42.2	44.6	44.6	43.8	3 806.9	3 930.2	4 016.5	3 917.9	1.1%
Jobs ('000)	33.7	35.2	36.8	35.2	3 474.5	3 593.1	3 649.9	3 572.5	1.0%
Unemployed ('000)	8.5	9.4	7.8	8.6	332.3	337.1	366.6	345.4	2.5%
Participation rate (%)	50.7	54.0	54.5	53.1	63.6	65.1	66.0	64.9	
Employment rate (%)	40.5	42.6	44.9	42.7	58.1	59.6	60.0	59.2	
Unemployment rate (%)	20.3	21.2	17.7	19.6	8.7	8.6	9.1	8.8	

Sources: Statistics Canada, Labour Force Survey and compilation from Human Resources and Skills Development Canada (HRSDC).

In 2003, the participation rate increased to 54.5% to reach its highest level since 1987. However, this high participation rate is attributable in large part to a decrease in the population old enough to work and not to an appreciable increase in the active population's workforce. For example, 2002 and 2003 show the same number of people in

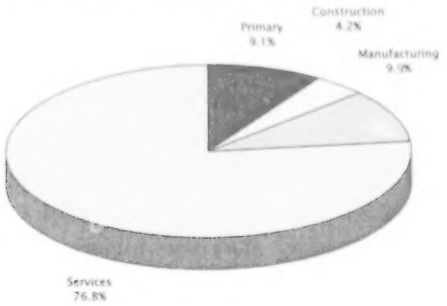
the active population, but the participation rate is higher in 2003 due to a decrease in the population aged 15 and older. The regions' participation rate remains the lowest of all of Quebec's economic regions.

The number of employed individuals increased significantly since 2001 in the Gaspé Area and the Magdalen Islands. 750 jobs were created on average per year, a growth rate of 2.2% per year. This growth rate is slightly higher than the one registered for all of Quebec (2%). The region's economy therefore benefited from the good economic conditions in Quebec in 2002 and 2003. However, the beginning of the three-year period was not very remarkable. In fact, in 2001, there was a decrease of 800 jobs. On the other hand, there was an average increase of 1 600 jobs in 2002 and 2003 (4.5%). The average of the three last years, with 35 2000 jobs, is higher than the 33 5000 average of the three years ending in 2000. The job growth was made almost exclusively in full-time jobs. The region created 900 full-time jobs on average per year between 2001 and 2003 (+3%). During the same period, part-time jobs dropped approximately 100 jobs per year (1.5%).

Let us underline that, despite everything, the region has ground to cover if it wants to attain its share of employment. With a little less than 1.4% of the population old enough to work in Quebec, the region corners only 1.1% of the jobs. It must be noted that since the existence of this data, the region has always taken slightly less jobs than its share of population in all of Quebec.

In the Gaspé Area-Magdalen Islands region, the employment rate reached a high of 44.9% in 2003, meaning that 4.5 people out of 10 old enough to work had a job. This rate is much lower than what was observed for all of Quebec. Quebec registered a 60% employment rate in 2003. The low number of people with a job is partly due to the seasonality of the labour market. In fact, the employment rate registers levels slightly higher than 40% at the season's weak point and upwards of 51% at the peak of the season. In Quebec, the variation between the minimum and maximum employment rate is almost 4 times less (58.6 and 61.5).

Graph 12: Distribution of Employment in 2001-2003,
Gaspé Area-Magdalen Islands Region



Source: Statistics Canada, Labour Force Survey

The primary sector represents an important part (9.1%) of the total jobs in the Gaspé Area-Magdalen Islands region. It is more than 3 times more important than for all of Quebec where it counts little more than 3% of jobs. Almost 80% of the 3 2000 jobs in this sector are in the following two sub-sectors: fishing activities and logging. Agriculture and mining is marginal with approximately 500 and 200 jobs respectively. Let us emphasize that due to the strong seasonality, the primary sector jobs fluctuate depending on the period of the year. In fact, at the seasonal activity's peak, it can represent almost 13% of employment (July) while in the lowest part of the season (January), it represents only slightly more than 6%.

The primary sector's share of employment had slight fluctuations in the 1990s. Its importance in terms of number of jobs and relevant share began to decrease in 1996. There has been a slight increase in the last two years.

Table 3: Distribution of Employment among Certain Industrial Groupings, Gaspé Area-Magdalen Islands Region

Industries	Average employment level in 2001-2003	Relative job share in the region	Relative job share in Quebec
All industries	35 200	100.0%	100.0%
Primary	3 200	9.1%	2.8%
Construction	1 500	4.2%	4.3%
Manufacturing	3 500	9.8%	18.1%
Services	27 100	76.9%	74.8%
Consumer services	10 900	30.9%	27.6%
Production Services	4 900	14.0%	23.4%
Public and parapublic services	11 300	32.0%	23.8%

Sources: Statistics Canada, Labour Force Survey and compilations from Human Resources and Skills Development Canada (HRSDC).
Note: The average employment level represents the average annual employment level.

The manufacturing sector represented 9.8% of the regional employment compared to 18.1% for all of Quebec. The activity is mainly concentrated in the sub-sectors linked to the exploitation of natural resources: forests and oceans. This sector employed approximately 3 500 people. The fish and seafood processing industry and the wood and paper product manufacturing industry held more than 85% of the labour for the manufacturing sector. Certain sub-sectors are in development, but their contribution to job growth is still marginal.

Since the last decade and in the eve of this decade, the manufacturing sector suffered the closure of several large businesses that employed a significant amount of labour. Employment in the manufacturing sector registered a slight decrease in the recent period. The depletion of natural resources (wood and groundfish) and the recent closures of important companies in the region (Gaspésia and Noranda) forced the communities to take their development in hand and no longer count on investments from large multinationals. Due to this occurrence, the domestic market's weak expansion possibilities and the decrease in natural resources, the possibilities of job growth will be determined by regional companies' ability to:

- Maintain and increase their presence in the foreign markets,
- Offer original and innovative products,
- Develop secondary and tertiary processing activities.

For several regional players, the emergence of an industrial sector related to wind energy (manufacturing of components: towers, blades and nacelles) is seen as an opportunity for the region to develop a manufacturing sector that is not linked to the exploitation of the

regions' natural resources and is able to offer specialized jobs that are permanent and well paid.

The place occupied by the services in the region's economic structure reached a much higher level than for Quebec. The service employed approximately 27 100 people, close to 77% of the labour (74.8% in Québec). In the last three years, the services sector registered slight increases in jobs. Certain sub-sectors made appreciable gains, others registered losses. In total, the sector registered a gain of 1 200 jobs.

The industrial activities related to services can be divided into three large sectors according to the destination of the service: consumer services[7], production services and public and parapublic services[8]. Production services[9] are the least important in the region with 4 900 jobs. Over the last three yeas, employment in this sector has remained stable. However, we observe a move toward company management activities, administrative support activities and professional and technical services, to the detriment to wholesale trade, transport, finance, insurance and real estate activities. With a relative share of 14%, their importance is much less that the share for Quebec (23.4%).

Consumer services provide 10 900 people with jobs in the region. Due to their dependence on tourism, a large portion of these jobs are seasonal. This sector has enjoyed good growth over the last few years.

Public and parapublic services provide 11 300 people with employment. These services occupy a much larger space than in Quebec with 32% of jobs compared to close to 24%.

Activities related to health care and social assistance represent an important portion of this sector with almost 20% of the regional employment contrary to a little more than 12% in Quebec. Job growth in the last three years was in the health and social assistance sectors. Teaching and public administration mostly registered losses.

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[7] Wholesale and retail trade, lodging/food service, culture and recreation, personal and various services.

[8] Education, social and health services and public administration.

[9] Transportation and storage, public utilities, finance, insurance, real estate and business services.

2. The Fishing Industry in the Magdalen Islands: An Overview

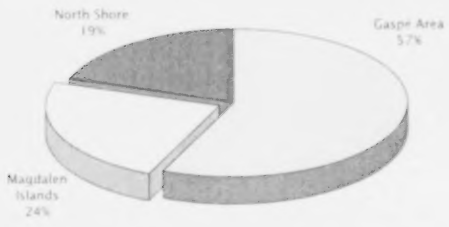
2.1 Marine Fisheries

2.1.1 Evolution of Landings

The Magdalen Islands is the second largest commercial fishing sector in Quebec. In 2003, Magdalen landings reached 13 400 t for a value of $43.8 M, which represent more than a quarter of the total landing in Quebec in value and almost 24% of the total volume landed.

Furthermore, even if mariculture[10] does not have the same importance as marine fisheries, this industry is in development in the Magdalen Islands. Mariculture production is mainly made up of mussels and scallops, while the production of soft-shell clams and oysters is still marginal. Scallop production is carried out by suspension and stocking. Over the last several years, several millions of scallops were stocked and will be harvested at their commercial size over the next few years. In 2003, six mariculture licences were issued to six businesses that occupy a little over 10 000 hectares. This large area is attributable to the scallop stocking areas. Mariculture creates approximately 70 jobs in the archipelago.

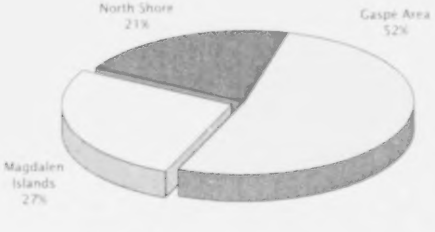
Graph 13: Distribution of Landings in Quebec's Maritime Sectors, in Volume, 2003p



Volume of Landings in Quebec: 56 630 t

Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Graph 14: Distribution of Landings in Quebec's Maritime Sectors, in Value, 2003p



Value of Landings in Quebec: 163 M$

Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

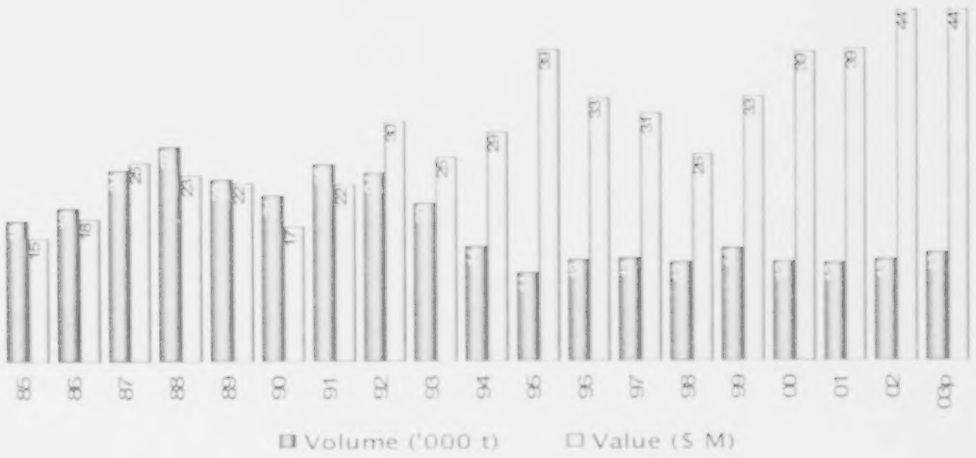
[10] Mariculture: saltwater aquaculture. The publication of the data on mariculture for the Magdalen Islands maritime sector is limited due to data confidentiality. In fact, few businesses are working in this area of economic activity in the Magdalen Islands (six businesses). A more exhaustive analysis of Quebec's aquaculture industry is available in this publication: *The Fishing Industry in Québec, Socio-Economic Profile, 2004*.

In 2003, commercial fishing landings were carried out in twelve fishing ports in the Magdalen Islands. The most important ports in terms of volume are, in order, Cap-aux-Meules, Grande-Entrée and Havre-Aubert. The most important in terms of value are Grande-Entrée, Cap-aux-Meules and Étang-du-Nord.

On the provincial scale, the Port of Grande-Entrée was third in 2003 in terms of value and volume, with landings of over 3 000 t for a landed value of $11.6 M. The Port of Cap-aux-Meules was also among the most important in Quebec with landings of 4 700 t for a value of $9.7 M. These results placed it second in terms of volume and fourth in terms of value.

When we compare these two ports with those in Atlantic Canada, the Port of Grande-Entrée was 28th in terms of value and 55th in terms of volume in 2002. The Port of Cap-aux-Meule was 33rd in terms of value and 48th in terms of volume.

Graph 15: Evolution of Landings in the Fishing Industry, Magdalen Islands, 1985-2003p



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

When we observe the landings in the Magdalen Islands, we see that their value increased significantly since 1998 and is well above the historical average since 1985. 2003 was practically identical to the historical peak reached the preceding year with a total value of almost $44 M. Over the course of the last four years, the average value of landings was $41.3 M, 60% more than in the fifteen preceding years. The high prices of lobster and crab explain this trend.

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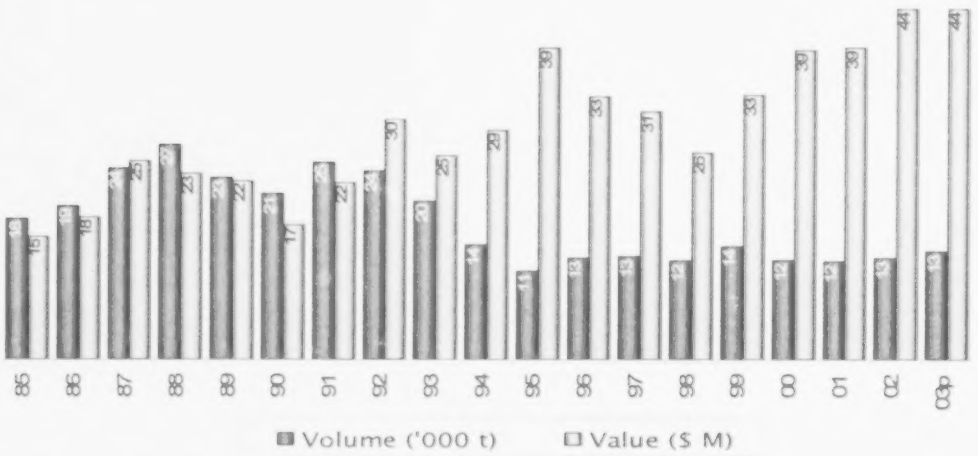
Graph 15: Evolution of Landings in the Fishing Industry, Magdalen Islands, 1985-2003p



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

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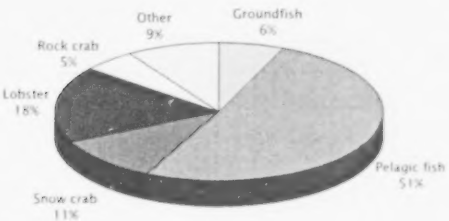
Despite the groundfish moratoria, the value of landings in the Magdalen Islands has not stopped growing. Income from crustaceans took over. It is another story for the volume of landings. They have been relatively stable at around 13 000 t since 1994. Formerly, landings were over 18 000 t. This difference can be explained by the landing of groundfish, mainly Atlantic cod, rockfish and Canadian plaice, which were largely higher before the first moratoria in the 1990s.

2.1.2 Species Landed

Mackerel and herring are the main species landed in the Magdalen Islands in terms of volume. By themselves, these two species represent 50% of the total volumes landed with 6 800 t. These are followed by landings of lobster (2 400 t), snow crab (1 400 t) and groundfish (800 t). Rock crab and whelk are emerging species for this sector.

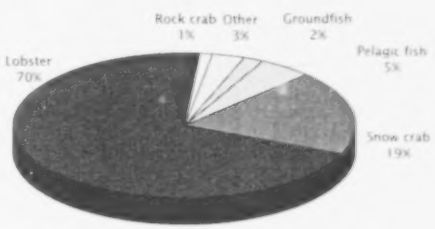
Graph 16: Breakdown of Species Landed, In Volume, Magdalen Islands, 2003p



Total Volume of Landings: 13 421 t

Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Graph 17: Breakdown of Species Landed, in Value, Magdalen Islands, 2003p



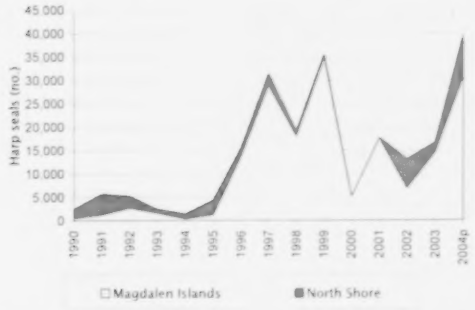
Total Value of Landings: 43,8 M$

Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

As for the value of commercial fishing, lobster has a primary role mainly due to its high price. This resource represented almost 70% of landings in value in the Magdalen Islands in 2003 with over $30.5 M. Snow crab fishing is next with landings worth $8.3 M, followed by pelagic fish with $2.2 M.

Seal hunting also represents an important economic activity for the Magdalen Islands with over $1 M in income in 2004. During this year, almost 31 000 harp seals were caught in this maritime sector. Harp seal captures vary greatly from season to season since 1990, as illustrated in the following graph. The variability of the ice conditions each spring is one of the reasons that explain the important variations in captures.

Graph 18: Evolution of the Catches of Harp Seals in Quebec, 1990-2004p

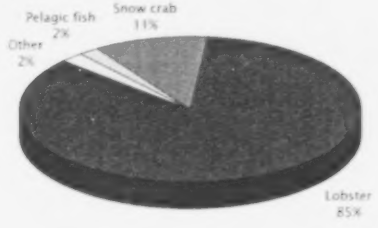


Source: Statistical Services, DFO, Ottawa and Quebec Region

2.1.3 Workforce

The distribution of fishing businesses according to main species landed emphasized the great importance of lobster fishing in the economic activities of the Magdalen Islands. In fact this species is the main activity for 324 fishing businesses. There are 42 active snow crab businesses, seven pelagic fish businesses and nine that fish another species for a total of 382 active businesses in the commercial fishing industry.

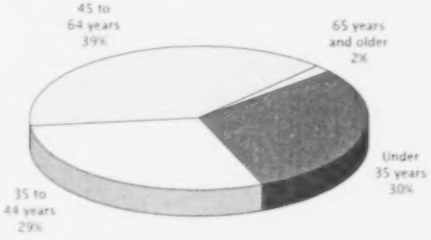
Graph 19: Distribution of Fishing Businesses According to Main Species Landed, Magdalen Islands, 2003p



382 fishing businesses

Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Graph 20: Distribution of Fishermen and Fisherman's Helpers According to Age, Magdalen Islands, 2003p

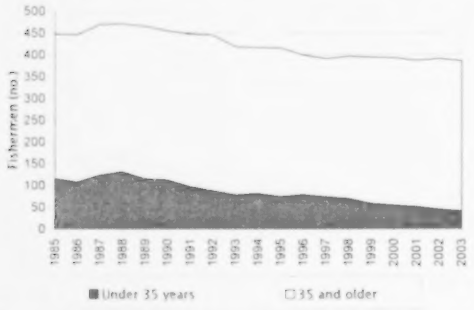


Fishermen and fisherman's helpers in the Magdalen Islands: 1 094

Source: Statistical Services, DFO, Quebec Region
For the fishermen and BAPAP for fisherman's helpers.
Compilation: DRPE, DFO, Quebec Region

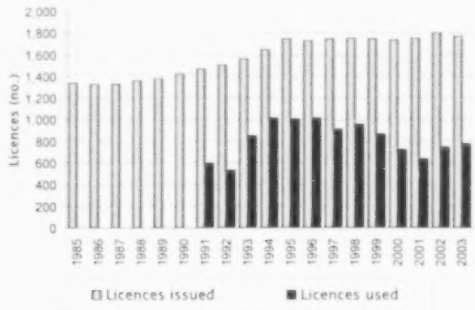
In 2003, the Magdalen Islands sector counted close to 1 100 fishermen and fisherman's helpers. A little more than a third (39%) are between 45 and 64 years of age, 29% are between 35 and 44 years of age and 30% are under 35 years of age. Let us note that the portion of fishermen under 35 years of age is above the average for Quebec.

Graph 21: Evolution of the Number of Fishermen According to Age, Magdalen Islands, 1985-2003p



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Graph 22: Evolution of the Number of Licences According to Status, Magdalen Islands, 1985-2003p



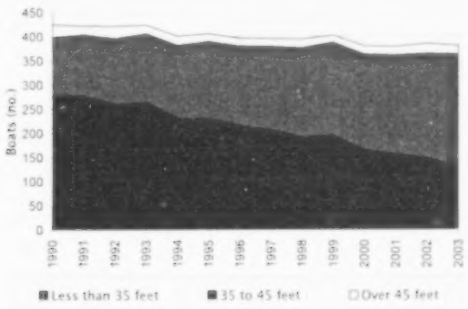
Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region
Note: The data on the licences used is not available for the period before 1991.

Since 1985, the number of fishermen[1] in the Magdalen Islands decreased almost 15% while the total number of licences issued increased 32%. This implies that that average number of licences held per fishermen has increased, from 3 in 1985 to 4.5 in 2003.

However, a large portion of the licences issued remain inactive. In fact, only 44% of the licences issued were used in 2003. This rate was generally stable at around 50% in the mid 1990s decreasing almost 37% in 2001 and was then re-established to total a little less than 800 licences used in 2003. The licence use rate in the Magdalen Islands is greatly influenced by the rate of pelagic fish activity. In 2003, a total of 995 licences were unused, with 838 giving access to the fishing of pelagic fish.

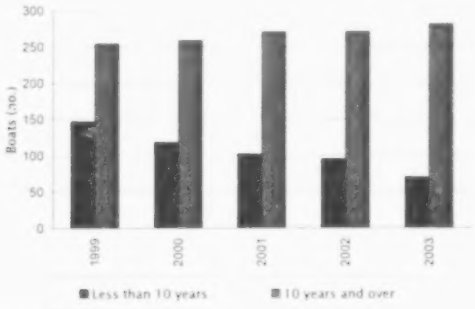
[1] The number of fishermen corresponds to the number of fishermen registered with the DFO. Not all of these fishermen are necessarily active.

Graph 23: Evolution of the Number of Active Fishing Boats According to Size, Magdalen Islands, 1990-2003p



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Graph 24: Evolution of the Number of Active Fishing Boats According to Age, Magdalen Islands, 1999-2003p



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Since 1990, the total number of active fishing boats in the Magdalen Islands followed a slight downward trend. In 2003, there were 381 active fishing boats in this maritime sector. The number of boats under 35 feet has decreased by more than half since 1990 in favour of an increase in the number of boats between 35 and 45 feet in length. The number of boats over 45 feet in length remained relatively stable over the course of this period. Today, there are 18 in the Magdalen Islands.

As to the distribution of boats according to age, we observe a constant decrease in number of boats less than 10 years old, which reflects an aging of the fishing boats in the Magdalen Islands. However, the aging of the fleet can be lesser than the statistics reflect, since the boats can be refitted (major renovations) to lengthen their operating life. In this case, a boat's age remains high according to the statistics, despite its reconditioning.

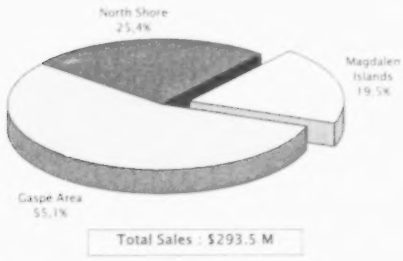
2.2 Processing of Fishery Resources

2.2.1 Evolution of Sales

The processing industry[12] in the Magdalen Islands is made up of 15 businesses that generally purchase their fish and seafood directly from the fishermen[13] to then resell them on the local or foreign market. Most of these businesses process their products once (freezing, salting, cooking, packing, etc.) before selling them. In 2002, the purchase of fish and seafood by these businesses reached $40.9 M and their sales totaled $57.2 M, 19.5% of the total for Quebec' maritime sectors.

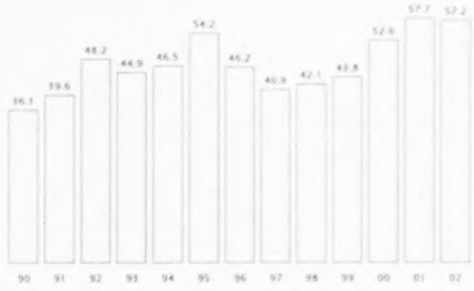
Despite several fluctuations, the sale of marine products in the Magdalen Islands grew significantly since 1990. In fact, sales rose from $36.1 M in 1990 to $57.2 M in 2002, a 31% increase. Lobster, whose sale rose from $15.4 M to $33.7 M during the same period, is responsible for the largest part of this increase.

Graph 25: Distribution of the Sale of Marine Products in the Maritime Sectors, 2002



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Graph 26: Evolution of Sales by Processing Businesses in the Magdalen Islands, 1990 to 2002 (millions of $)



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

In general, when lobster sales increase in Quebec compared to the sale of other species, the Magdalen Islands, which dominate this section of the processing, see their share of total sales in Quebec increase. On the other hand, when there is a strong increase in the sale of shrimp or snow crab in Quebec, as was the case for several years in the last decade, notably in 2002, the Magdalen Islands' share decreases.

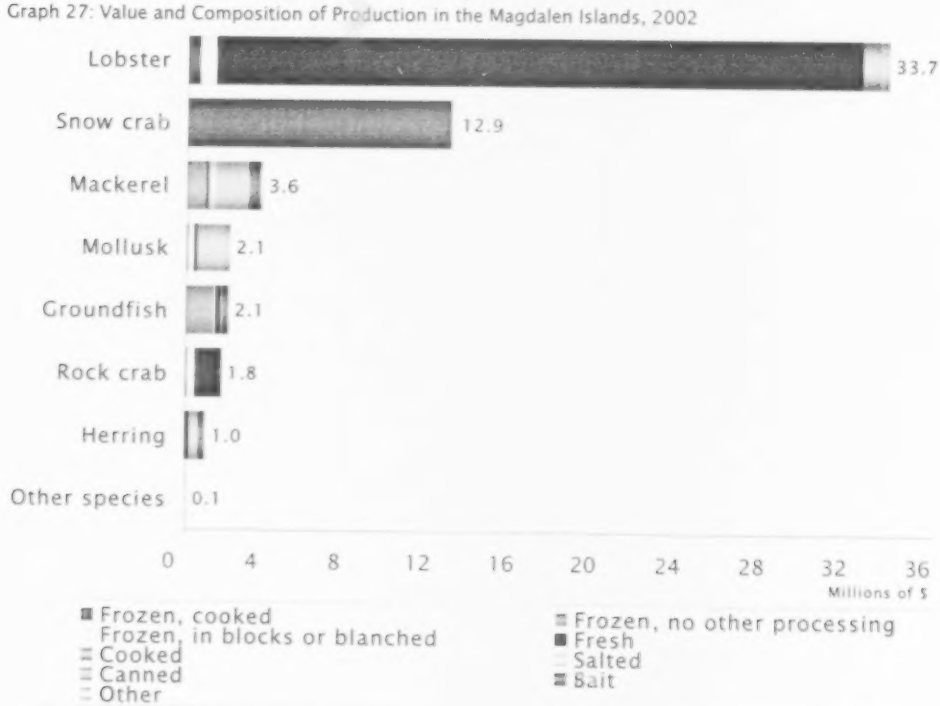
[12] The term "processing" refers to all activities in the fishing industry's secondary and tertiary sector.

[13] 100% of the purchases stemmed from ports of landing in the Magdalen Islands in 2002.

2.2.2 Species Sold

In 2002, lobster was sold for $33.7 M in the Magdalen Island, which makes it the main species processed in this sector (59% of the sales for this sector). Almost 92% of lobster is sold fresh and alive. The rest is sold frozen, cooked or canned. A good portion of lobster is sold on the domestic market. Snow crab, sold cooked and frozen, is the second most important species with sales reaching $12.9 M and representing 22% of the production value for this sector. Snow crab from Quebec is mainly exported to the United States and Japan. Third in importance is mackerel, sold in various forms, for a value of $3.6 M, followed by mollusks ($2.1M: scallop and surf clam), groundfish $2.1 M: cod and halibut), rock crab ($1.8 M) and herring ($1 M).

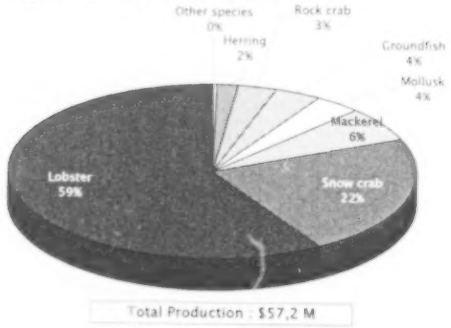
Graph 27: Value and Composition of Production in the Magdalen Islands, 2002



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

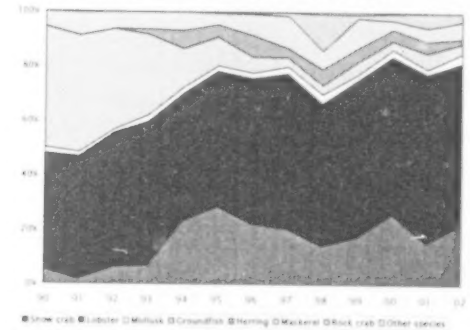
Between 1990 and 2002, the portion of groundfish in the total sales of marine products in the Magdalen Islands dropped significantly, from 44% to 4%. This decrease only emphasized a trend already begun in 1987, when the share of groundfish reached 52%. This drop in sales is attributable to a stock collapse and the moratoria put into effect in the 1990s.

Graph 28: Composition of Species Sold, in % of the Value in the Magdalen Islands, 2002



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Graph 29: Composition of Species Sold in % of the Value in the Magdalen Islands, 1990 to 2002



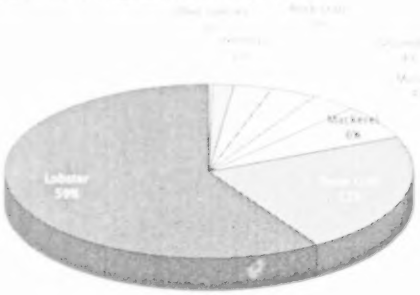
Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

The drop in the sales of groudfish was compensated in large part by sales of lobster which rose from 42% to 59% between 1990 and 2002. Snow crab sales rose from $2 M to $13 M in the same period and its portion increased significantly (5% to 23%). The sale of pelagic fish (herring and mackerel) and mollusks (scallop, surf calm), although enjoying slight increases in absolute terms, did not increase in total percentage. Finally, rock crab only begun to be fished and processed on a large scale in 1994 in the Magdalen Islands. Sales for this species reached $1.8 M and counted 3.1% of the sales for the archipelago in 2002. That made rock crab the fourth species in terms of sales, after lobster, snow crab and mackerel.

2.2.3 Labour

The number of jobs in the Magdalen Islands decreased in the processing sector beginning in the early 1990s. While there were on average 1 030 jobs in the processing businesses in the Magdalen Islands between 1990 and 1995, there were only 835 between 1996 and 2002. Despite an increase in production value in the last twelve years, this represents 200 less jobs in Magdalen Islands factories in 2002 as compared to 1990. The processing industry provided a little more than 800 jobs in 2002. From this number, we estimate that approximately 230 were attributable to the processing and sale of mackerel, 150 to lobster, 130 to snow crab and 120 to herring. It is noteworthy that these numbers represent the maximum number of employees and the majority of these jobs are seasonal.

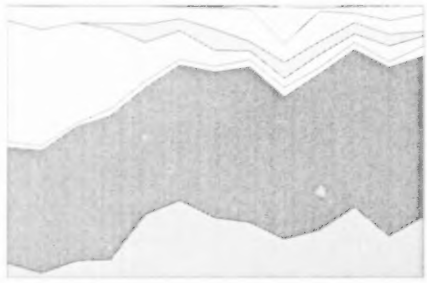
Graph 28. Composition of Species Sold, in % of the Value in the Magdalen Islands, 2002



Total Production : $57.2 M

Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Graph 29. Composition of Species Sold in % of the Value in the Magdalen Islands, 1990 to 2002



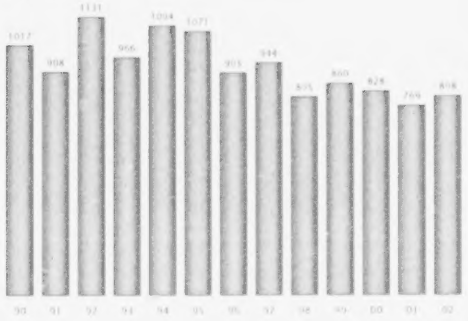
Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

The drop in the sales of groudfish was compensated in large part by sales of lobster which rose from 42% to 59% between 1990 and 2002. Snow crab sales rose from $2 M to $13 M in the same period and its portion increased significantly (5% to 23%). The sale of pelagic fish (herring and mackerel) and mollusks (scallop, surf calm), although enjoying slight increases in absolute terms, did not increase in total percentage. Finally, rock crab only begun to be fished and processed on a large scale in 1994 in the Magdalen Islands. Sales for this species reached $1.8 M and counted 3.1% of the sales for the archipelago in 2002. That made rock crab the fourth species in terms of sales, after lobster, snow crab and mackerel.

2.2.3 Labour

The number of jobs in the Magdalen Islands decreased in the processing sector beginning in the early 1990s. While there were on average 1 030 jobs in the processing businesses in the Magdalen Islands between 1990 and 1995, there were only 835 between 1996 and 2002. Despite an increase in production value in the last twelve years, this represents 200 less jobs in Magdalen Islands factories in 2002 as compared to 1990. The processing industry provided a little more than 800 jobs in 2002. From this number, we estimate that approximately 230 were attributable to the processing and sale of mackerel, 150 to lobster, 130 to snow crab and 120 to herring. It is noteworthy that these numbers represent the maximum number of employees and the majority of these jobs are seasonal.

Graph 30: Number of Jobs in the Marine Product Processing Sector, Magdalen Islands, 1990 to 2002



Source: Statistical Services, DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

Table 3: Main Businesses in the Magdalen Islands, Marine Product Processing Sector, 2002

BUSINESS NAME	COMMUNITY NAME	NUMBER OF JOBS	PRODUCTION
PÊCHERIES NORPRO 2000	HAVRE-AUBERT	150 to 175	$10 to $25 M
MADELIMER	GRANDE-ENTRÉE	150 to 175	$5 to $10 M
LES PÊCHERIES GROS CAP	CAP-AUX-MEULES	125 to 150	$10 to $25 M
MADELIPÊCHE	CAP-AUX-MEULES	75 to 100	Under $5 M
FRUITS DE MER MADELEINE	ÉTANG-DU-NORD	50 to 75	$5 to $10 M
CAPE DOLPHIN FISHERMAN COOP	GROSSE-ÎLE	50 to 75	$5 to $10 M
POISSON FRAIS DES ÎLES	MILLERAND	50 to 75	N/A
POISSONNIÈRE J.B.L.	BASSIN	50 to 75	N/A
J.W. DELANEY	HAVRE-AUX-MAISONS	10 to 25	Under $5 M
LES PÊCHERIES HUBERT	HAVRE-AUX-MAISONS	10 to 25	Under $5 M
9 OTHER BUSINESSES		37	14 M $
TOTAL		869	$57.2 M

Sources: MAPAQ, CRIQ and DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

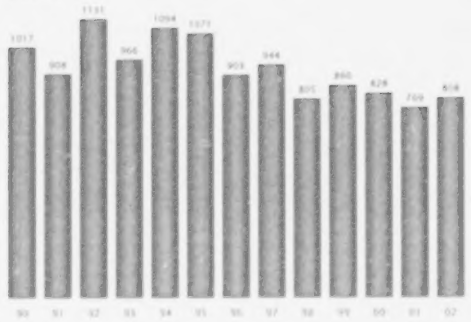
2.2.4 Businesses

The marine product processing sector in the Magdalen Islands was made up, in 2002, of 16 businesses spread out in ten or so communities. However, the seven main businesses in this sector (see Table 4) made up 87% of sales and 90% of the industry's jobs. These seven businesses all hire between 50 and 175 workers and generally have processing equipment. The nine other businesses have on average less than ten employees and a turnover of a little more than $800 K. These small businesses generally specialize in sales and process very little of the marine products they buy from the fishermen.

2.2.5 Outlook for 2003

While the data for the processing sector is not yet available for 2003, it is possible to make some estimations using the preliminary landing numbers. These numbers indicate that landing values have decreased 4% in the Magdalen Islands to reach $39.7 M. In Quebec, we can observe a slightly stronger decrease, 8%. We should therefore expect that the data on the processing industry in the Magdalen Islands for 2003 will reveal a slight drop in sales, but that its share in the total production in Quebec will increase slightly compared to other maritime sectors.

Graph 30: Number of Jobs in the Marine Product Processing Sector, Magdalen Islands, 1990 to 2002



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POISSONNIÈRE S.E.L.	BASSIN	10 to 25	N/A
J.W. DELANEY	HAVRE-AUX-MAISONS	10 to 25	Under $5 M
LES PÊCHERIES HUBERT	HAVRE-AUX-MAISONS	10 to 25	Under $5 M
6 OTHER BUSINESSES		32	3.4 M $
TOTAL		808	$57.2 M

Sources: MAPAQ, CRIQ and DFO, Quebec Region
Compilation: DRPE, DFO, Quebec Region

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SUMMARY AND CONCLUSION

The Magdalen Islands maritime sector has undergone some significant changes over the last several years. From a demographic point of view, the Magdalen Islands suffered, like other resource regions in Quebec, a decline in population. Between 1996 and 2001, this sector lost 8% of its population mainly due to the youth exodus. Such changes inevitably contribute to the aging of the population.

The fishing industry remains a very important activity in the economy of the Magdalen Islands. Fishing generates over 80% of jobs in the primary and secondary sectors. In 2001, close to 1 800 people were working in the fishing industry in the Magdalen Islands, almost 25% of the total jobs in this industry in Quebec.

With close to a quarter of the captures in Quebec, Magdalen Islands fishermen landed fish and seafood for a value of almost $44 M during the 2003 fishing season, the second record season. The main species in terms of value is still lobster, which represents 70% of the captures, followed by snow crab. In terms of volume, however, pelagic fish are in the lead with over 50% of volumes landed.

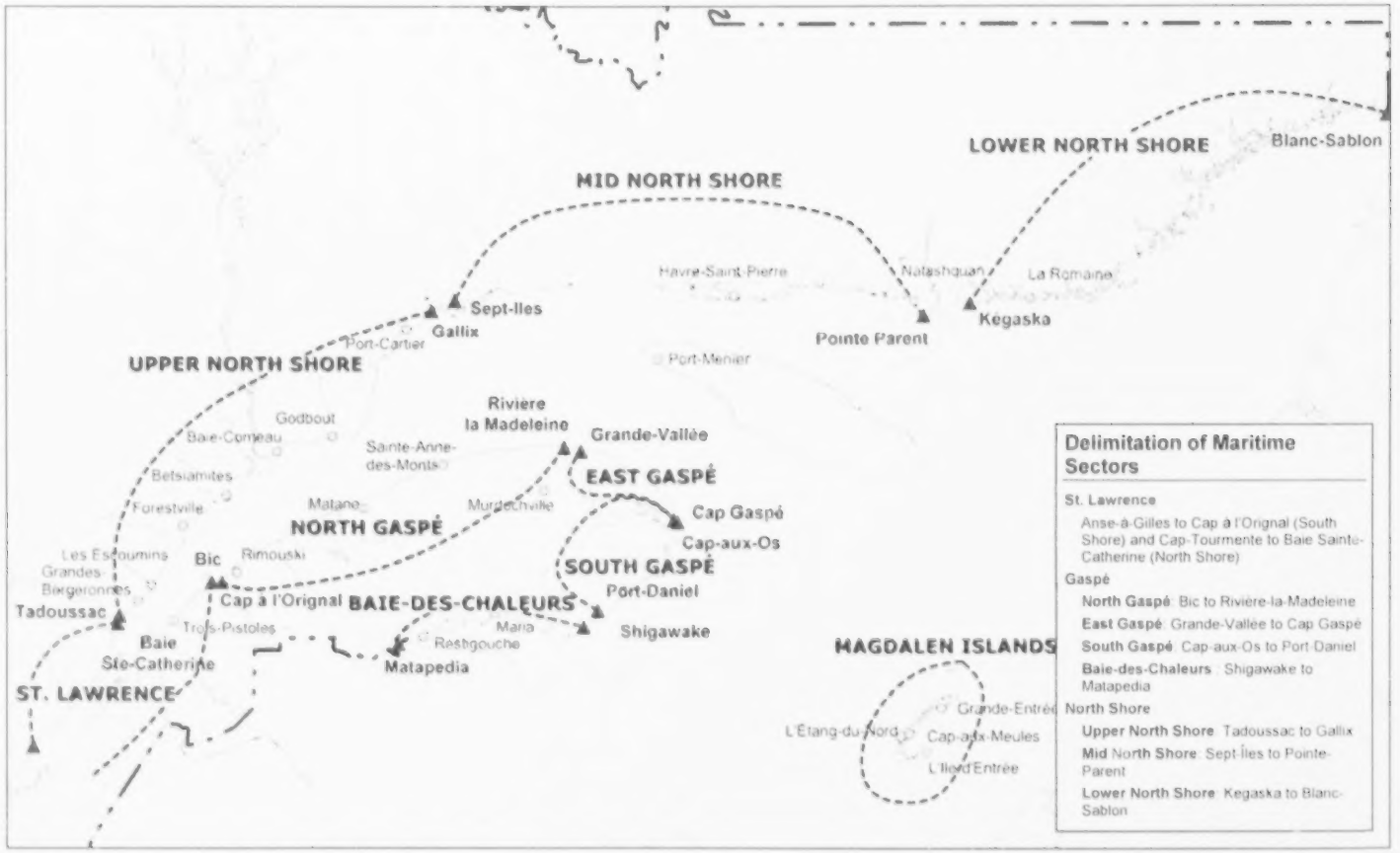
Lobster is also the main species landed for a large number of fishermen. In fact, for the 2003 season, 85% of the fishing businesses named lobster as their main species landed.

As in the capture sector, lobster is an easy first in sales made by processing businesses. Almost 60% of the sales made were from lobster. This crustacean is by all means a major player in the economic activity for this maritime sector.

Even though the fishing sector generates record incomes for captures as well as processing, this sector also faces several problems: a decline in population, strong dependence on the fishing sector and more precisely, lobster fishing. On the other hand, we are observing the emergence of a mariculture industry and a certain development of new fishing activities such as rock crab fishing.

APPENDIX

MARITIME SECTORS IN QUEBEC



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